APPLICATION NOTE

Five reasons electricians and HVAC technicians need professional grade laser levels

Whether you're laying out a new commercial electrical or HVAC system or retrofitting an existing setup, the process can be long and tedious. By adding laser levels to your tool bag you can work both faster and more precisely. However, some of the laser levels available have proven they break easily and lose calibration during regular, on-the-job handling.

Recognizing a gap in what was available and what technicians needed, Fluke decided to apply its well-known ruggedness, accuracy, and reliability to a line of professional grade laser levels. These Fluke laser levels have been tested and proven to withstand a one meter drop. They are easy to use and versatile enough to serve a range of electrical and HVAC layout requirements. If you’re wondering why you need a Fluke professional grade laser level, here are five good reasons:

1. **Accuracy. Accuracy. Accuracy.**
   Whether you’re installing switchgear, duct work, cable trays, lighting, outlets, or switches it is critical that they map to a straight line, either for performance or aesthetics, or both. Chalk lines and reference strings sag, smear, and disappear. Fluke Line Laser Levels project precise, readable reference points accurate to 3 mm at 10 meters. And they deliver results instantly thanks to a fast settling, self-leveling gimbal.

2. **Survives rough handling.**
   You may already have tried using a laser level only to find that you had to handle it with kid gloves. Existing laser levels tend to break easily or lose calibration if dropped. Let’s face it, when you’re working on a job site, things get dropped, and you can’t afford to replace your laser level every time that happens. Fluke added a protective rubber housing to enable its laser levels to pass a one meter drop test and stay in calibration.

3. **Time really is money.**
   It may be a cliché but it’s also true. It’s estimated that electricians may spend up to 25% of their time measuring and laying out a job. Traditional tools like bubble levels or plumb bobs and chalk often require at least two people. With Fluke laser levels, one person can measure out a grid pattern on the floor and transfer the points to the ceiling to ensure precise positioning of the fixtures. This minimizes the number of trips up a ladder or lift, which saves time and reduces risk. What used to take hours now takes minutes, making you more productive and more accurate.

4. **Lasers don’t smear or brush away.**
   Even if your eyes are good, it’s not always easy to see a chalk line in a dusty or dim environment. If the environment is humid or wet, the odds are good that the chalk line will disappear. Fluke line laser levels produce crisp bright continuous lines for better visibility. Fluke point laser levels project three clearly visible spots. Both types are available with either red or green lasers. And for high ambient lighting conditions, Fluke Laser Line Detectors help you locate the laser line, quickly and efficiently, indoors or outdoors.
You need versatile tools.

Electricians and HVAC technicians install a lot of different kinds of equipment in a variety of environments. Fluke Laser Levels are designed to help you map out those installations quickly, simply and accurately, in just about any environment. For example:

- Duct work and cable trays. Use a point laser to transfer reference points from the floor to the ceiling to quickly install cable trays and duct work. You can also use a line laser to make sure everything is laid out in a straight line.

- Switchgear and mechanical equipment. Project a laser line (rather than a chalk line) to easily and accurately drill all of the mounting holes in the floor for switchgear or mechanical equipment. This increases precision and eliminates the risk of smeared chalk, helping to ensure that you only have to move the heavy equipment once.

- Conduit and rigid cable. These installations require perfectly aligned holes on the floor and ceiling (or opposite walls) for a proper fit. You can use a line laser to easily line up the center points of several holes at once, or a point laser to transfer single points.

- Long lighting fixture runs. Use a point laser to determine reference points for a long fixture run and a line laser to create a perfectly straight run. This can save trips up the ladder or scissor lift and increase accuracy.

- Outlets and switches. Use a line laser level to easily align a whole wall of outlets and switches at once. This saves time and increases accuracy over using a chalk line or a measuring tape.